

Photovoltaic (PV) Design & Installation Basics

January 9–13, 2012

5 days (40 hours)

8:30 am – 4:30 pm each day

The New York State Energy Research and Development Authority (NYSERDA) and the Interstate Renewable Energy Council (IREC) in cooperation with SUNY Delhi is pleased to announce a five day course designed for those who have an interest in PV and want to learn how to design and install a PV system. Typically, the background and experience of each participant can vary significantly. We endeavor to make this course meaningful to all who attend, from the homeowner looking to make an informed decision, to the tradesman who wants to install a PV system.

- Basics of electricity and PV
- Site survey
- System sizing
- Selection of proper PV equipment and balance of system components
- Proper construction techniques
- Voltage drop considerations and wire sizing
- N.E.C. requirements
- Safety issues while working with PV installations
- Battery safety

There will be hands-on experience installing a grid-tied and battery-based system.



ISPQ Accredited

SUNY Delhi is one of the few ISPQ
(Institute for Sustainable Power Quality)
accredited program providers in the
United States.
Renewal pending

*This workshop meets the minimum of 40
hours of formal training from an ISPQ
accredited institution encouraged by NABCEP.
(see above)*

Registration Information

Register by **phone** (607) 746-4545 with Visa,
MasterCard or Discover.

Register by **fax** (607) 746-4547 with Visa,
MasterCard or Discover and the completed
registration form.

Register by **mail**: SUNY Delhi, Business &
Community Services, 146 Bush Hall, Delhi, NY
13753



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SUNY Delhi

NYSERDA

New York State
Energy Research and
Development Authority



We look forward to the opportunity to increase awareness of the sun's potential as a sustainable alternative energy.

Instructor

**Mr. Robert Morris, Retired SUNY Delhi,
Assistant Professor Emeritus Status
NABCEP Certified Installer**

Professor Morris taught for 29 years in the Electrical Construction and Maintenance Program. He was instrumental in obtaining I.S.P.Q accreditation for SUNY Delhi, and establishing a course in Photovoltaic Design & Installation, which he taught until his retirement. Professor Morris continues teaching workshops for SUNY Delhi as well as working in the electrical and photovoltaic trades.

Questions regarding level of instruction, preparation or topics covered may be directed to Bob Morris at morrisrv@delhi.edu. *

*There are no prerequisites to take the class, but we encourage individuals who have no prior experience to familiarize themselves electrical terminology, calculations of series and parallel circuits, and some knowledge of the National Electric Code. Please contact instructor for more information.



An optional NABCEP PV Entry Level Exam will be offered Friday, January 13th at 2:00 pm to those who have successfully completed the 40-hour course. Registration is required in advance. Exam fee is \$100. For more information about the exam go to www.nabcep.org and select "Entry Level" from the menu on the left side of the screen.

All participants are required to bring a calculator, notebook, and pen or pencil. Textbook will be provided. Meters and NEC codebooks will be provided.

Participants are *encouraged* to bring their own hand tools, such as screwdrivers, wire strippers, etc. as well as a copy of the National Electrical Code if they have them.

Please notify us if you have any special medical or safety issues. Safety policies and procedures will be reviewed and signed on the first day of class.

PV Registration Form

One registration form per person, please. Photocopies acceptable.

PLEASE PRINT

Name: _____

Email Address: _____

Business/Organization: _____

Business Address: _____

City/State/Zip: _____

Business Telephone: _____

Cell Phone: _____

The class cost is \$899.00. Optional exam an additional \$100.
Lunch and textbook will be provided. Registrants will receive a listing of local dining and lodging venues.

Payment in full must be made by December 26, 2011. A cancellation fee of \$200 per person will be charged between December 26th, 2011 and January 2nd, 2012. No refunds available after January 3rd, 2012. Registrations are transferable.

I have read, and understand, the cancellation/refund policy.

Signature _____

Make Checks/money orders payable to *SUNY Delhi*.

PO/Voucher #: _____

Visa/MC/Disc #: _____

Name on Card: _____

Amount Authorized _____

Expiration Date: _____

Signature: _____